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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,872	10/12/2006	Robert Uden		5893

60333 7590 11/10/2009

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EXAMINER	
HOOK, JAMES F	

ART UNIT	PAPER NUMBER
3754	

MAIL DATE	DELIVERY MODE
11/10/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/599,872	UDEN, ROBERT	
	Examiner	Art Unit	
	James F. Hook	3754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 August 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *26-35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *26-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 26-30 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Bergmann. The reference to Bergmann discloses the recited fluid conditioner, where the use of such with water is merely intended use where the structure is capable of use with any fluid, comprising a pipe 1, a plate 7 located in the pipe and having at least one side of the plate means for causing the water flow to adopt a torturous path through the pipe, including a plurality of posts 6 which also would be considered longitudinal ribs as well where some posts 6 can be considered posts and some can be considered ribs, they extend from the sides and tops of the plate, they are adjacent an inner surface of the pipe, they are in rows that are parallel to a longitudinal axis of the plate, the posts are at a normal angle, and the plates and posts have the same height, the posts pass through the plate. Any of the plates 2 are considered substantially flat plates with posts sticking out at normal angles from the plate on both sides thereof, the plate is seen to

run the length of the pipe, and is substantially equal to the inner diameter, and the posts are adjacent the inner wall of the pipe.

Claims 26-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Neveux. The reference to Neveux discloses the recited flow conditioner comprising a pipe 12, a substantially flat plate 14 extending along a substantial portion of a length of the pipe, the width is substantially equal to an inner diameter of the pipe as seen in figure 1, a plurality of posts 38 extending at a normal angle to the side of the plate, extending from both sides of the plate to be adjacent the inner wall of the pipe for causing water flowing through the pipe to adopt a torturous path through the pipe, the posts are bent from the plate and pass through a hole in the plate therefore they are passing through the plate, and where the posts are arranged in rows on or parallel to the longitudinal axis of the plate.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bergmann in view of Bey. The reference to Bergmann discloses all of the recited structure with the exception of forming the ribs of different heights. The reference to Bey discloses a flow deflecting plate as seen in figure 7 which has a plate that is

oriented in the vertical direction with a plurality of ribs 62,64,66,68 of different lengths to match the curve of the inside of the pipe. It would have been obvious to one skilled in the art to modify the plates in Bergmann to be of varied heights to match the curve in a pipe wall as suggested by Bey where such would inherently insure mixing even close to the wall of the pipe.

Claims 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergmann in view of Getchell. The reference to Bergmann discloses all of the recited structure with the exception of providing a truncated conical member to direct flow toward the central portion of the pipe. The reference to Getchell discloses the recited fluid conditioner, where the use of such with water is merely intended use where the structure is capable of use with any fluid, comprising a pipe 7, a plate 15 located in the pipe and having at least one side of the plate means for causing the water flow to adopt a torturous path through the pipe, including a plurality of posts 16, the posts are at a normal angle to the plate, and means for directing the flow into the central position such as a truncated conical member 5 located at the inlet of the pipe, the posts pass through the plates. It would have been obvious to one skilled in the art to provide the pipe in Bergmann with a means to direct flow to a central position of the pipe in the form of a conical member as suggested by Getchell where such is a known structure used in combination with a flow conditioner plate and provides additional control of flow characteristics of the fluid flowing there through to insure proper conditioning.

Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bergmann in view of Schindler. The reference to Bergmann discloses all of the recited

structure with the exception of applying an EMF to the conditioner. The reference to Schindler discloses the recited water conditioner, comprising a pipe 1, a plate 10 located in the pipe and having at least one side of the plate means for causing the water flow to adopt a torturous path through the pipe, including a plurality of posts 11 which also would be considered longitudinal ribs as well where some posts 11 can be considered posts and some can be considered ribs, they extend from a side of the plate, they are substantially adjacent an inner surface of the pipe, they are in rows that are parallel to a longitudinal axis of the plate, the posts are at a normal angle, and the plates and posts have the same height, where the posts being made of magnetic material would inherently create an EMF field. It would have been obvious to one skilled in the art to provide the pipe in Bergmann with a means to create an EMF as suggested by Schindler where such is a known structure used in combination with a flow conditioner plate and provides additional conditioning of the fluid flowing there through to insure proper conditioning and reducing scale build up in the pipe.

Claims 29, 30, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neveux in view of Bergmann. The reference to Neveux discloses all of the recited structure with the exception of providing ribs that extend lengthwise and spaced on the plate that are the same height as the posts. It would have been obvious to one skilled in the art to modify the posts in Neveux by providing longitudinally formed bent ribs that are spaced and also are substantially equal to the diameter of the pipe as suggested by Bergmann where such is another known way to form the same type of

bent structures from a plate for conditioning flow of fluid through a pipe and where such would enhance the conditioning ability of the device.

Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Neveux in view of Bergmann as applied to claims 29, 30, and 32 above, and further in view of Bey. The reference to Neveux as modified discloses all of the recited structure with the exception of forming the ribs of different heights. The reference to Bey discloses a flow deflecting plate as seen in figure 7 which has a plate that is oriented in the vertical direction with a plurality of ribs 62,64,66,68 of different lengths to match the curve of the inside of the pipe. It would have been obvious to one skilled in the art to modify the plates in Neveux as modified to be of varied heights to match the curve in a pipe wall as suggested by Bey where such would inherently insure mixing even close to the wall of the pipe.

Claims 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neveux in view of Getchell. The reference to Neveux discloses all of the recited structure with the exception of providing a truncated conical member to direct flow toward the central portion of the pipe. The reference to Getchell discloses the recited fluid conditioner, where the use of such with water is merely intended use where the structure is capable of use with any fluid, comprising a pipe 7, a plate 15 located in the pipe and having at least one side of the plate means for causing the water flow to adopt a torturous path through the pipe, including a plurality of posts 16, the posts are at a normal angle to the plate, and means for directing the flow into the central position such as a truncated conical member 5 located at the inlet of the pipe, the posts pass through

the plates. It would have been obvious to one skilled in the art to provide the pipe in Neveux with a means to direct flow to a central position of the pipe in the form of a conical member as suggested by Getchell where such is a known structure used in combination with a flow conditioner plate and provides additional control of flow characteristics of the fluid flowing there through to insure proper conditioning.

Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Neveux in view of Schindler. The reference to Neveux discloses all of the recited structure with the exception of applying an EMF to the conditioner. The reference to Schindler discloses the recited water conditioner, comprising a pipe 1, a plate 10 located in the pipe and having at least one side of the plate means for causing the water flow to adopt a torturous path through the pipe, including a plurality of posts 11 which also would be considered longitudinal ribs as well where some posts 11 can be considered posts and some can be considered ribs, they extend from a side of the plate, they are substantially adjacent an inner surface of the pipe, they are in rows that are parallel to a longitudinal axis of the plate, the posts are at a normal angle, and the plates and posts have the same height, where the posts being made of magnetic material would inherently create an EMF field. It would have been obvious to one skilled in the art to provide the pipe in Neveux with a means to create an EMF as suggested by Schindler where such is a known structure used in combination with a flow conditioner plate and provides additional conditioning of the fluid flowing there through to insure proper conditioning and reducing scale build up in the pipe.

Response to Arguments

Applicant's arguments filed April 8, 2009 and August 21, 2009 have been fully considered but they are not persuasive. The reference to Bergmann does teach a plate can be seen to be "substantially" the width of the pipe when the term substantially allows for it to be different in size, and the horizontal plate 2 has vertical posts that extend to the wall and the device is friction fit which would be substantially equal to the diameter of the tube in order to be in frictional contact with the inside wall of the tube, and since the device is seen to run the length of the tube its disposed in this limitation is met as well, where mixing of a flow is a form of conditioning the flow by providing more turbulence thereto. The remaining arguments are moot due to the references no longer being used as base references for rejections of the independent claim.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references to O'Brien, Brinen, Blackmore, Chartet, and Jung disclosing state of the art flow conditioners including EMF conditioners.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James F. Hook whose telephone number is (571) 272-4903. The examiner can normally be reached on Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James F. Hook/
Primary Examiner, Art Unit 3754

JFH